

Remarks

This Amendment is in response to the Office Action dated **June 22, 2010**. In the Office Action, claims 1-2, 4-14, 16, 18-25, 29-33, and 35 were rejected under 35 USC 102(b) as being anticipated by Cottone, Jr. (5,549,663), or in the alternative, under 35 U.S.C. 103(a) and claims 1-2, 4-14, 16, 18-25, 29-33, and 35 were rejected under 35 USC 102(c) as being anticipated by Becker (6,117,165).

The following comments are presented in the same order, with section headings, as the Office Action.

35 USC 102/103 - Cottone

In the Office Action, claims 1-2, 4-14, 16, 18-25, 29-33, and 35 were rejected under 35 USC 102(b) as being anticipated by Cottone, Jr. (5,549,663).

As discussed below in greater detail in sections A-E, Cottone does not teach or suggest each and every element of claims 1-2, 4-14, 16, 18-25, 29-33, and 35. Applicant requests withdrawal of the rejection and submits that claims 1-2, 4-14, 16, 18-25, 29-33, and 35 are in condition for allowance.

A. Claims 1, 5, 6, 8, 19-20, 32

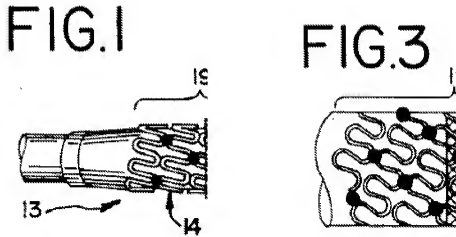
The instant claims recited a “direct connection” or a “separate bridging member.” Cottone does not teach or suggest either a direction connector or a separate bridging member as recited in the instant claims.

Cottone does not teach or suggest “a direct connection”

Claims 1, 5, 6, 8, 19, and 32 each recite in part “a direct connection between a linear portion of the first strut that lies side by side with a linear portion of the second strut.” The instant claims also recite “substantially straight struts connected by apex sections.”

Applicant disagrees that Cottone discloses a direct connection as recited in the instant claims. Cottone discloses leg 16 joined by connecting portion 17. As shown in Figs. 1 and 3-4 of Cottone, some of the adjacent connecting portions 17 are engaged one to another by welds 18. The connecting portions 17 are not linear portions of two struts. Instead, the

connecting portions have curvature, as shown in the figures of Cottone. For reference, a copy of a portion of Figs. 1 and 3 of Cottone are provided:



For at least this reason, Cottone does not teach a direct connection between linear portions as recited in the instant claims. Moreover, Cottone does not suggest that the welds can engage two legs to one another. For at least this reason, Cottone does not suggest a direct connection as recited in the instant claims.

Cottone does not teach or suggest a “separate bridging member”

Claims 1, 5, 6, 8, 20, and 32 each recite in part “a separate bridging member having a first portion welded to the first strut and a second portion welded to the second strut.” Claim 30 depends upon independent claim 1 and recites “wherein the separate bridging member is parallel to a linear portion of the first strut and to a linear portion of the second strut.”

Applicant disagrees that a weld is a separate bridging member with first and second portions as recited in the instant claims. In reference to welds 18, Cottone states that “they are preferably formed by a fusion welding procedure” and that “[t]he fusion welding energy source typically is directed onto the location of the connecting portion pairs” (col. 5, lines 54-56 and col. 6, lines 13-14). Thus, the welds of Cottone are formed by the fusion of the material forming one connecting portion 17 and the material forming another connecting portion 17. For at least this reason, Cottone does not teach or suggest a separate bridging member welded to two struts.

Even if for argument sake only, a weld were considered to be a separate bridging

member, as discussed above, Cottone discloses that the weld engages adjacent connecting portions 17, not adjacent legs 16. For at least these reasons, Cottone does not teach a separate bridging member as recited in the instant claims. Moreover, as discussed above, Cottone does not suggest that welds can engage two legs to one another. For at least this reason, Cottone does not suggest a separate bridging member as recited in the instant claims.

Conclusion

Based on the above, Applicant submits that claims 1, 5, 6, 8, 19, and 32 are patentable over Cottone. Applicant requests withdrawal of the rejection and submits that claims 1, 5, 6, 8, 19, and 32 are in condition for allowance.

B. Claims 7, 8, and 22 – Cottone does not teach or suggest a “plane perpendicular to axis of stent”

Claim 7 depend on independent claim 6 and recites:

wherein said end elements define a plane perpendicular to the axis of said stent

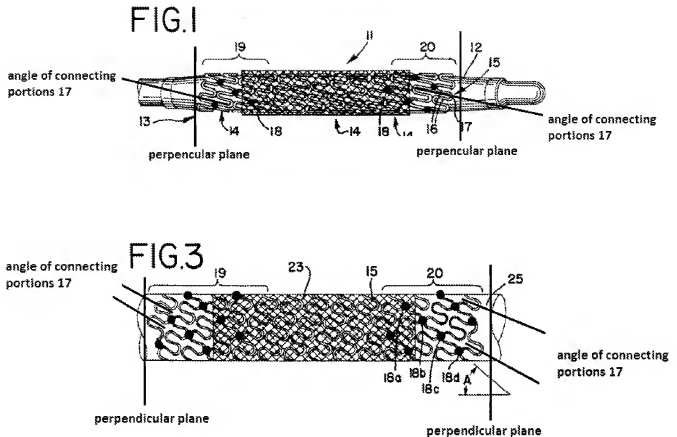
Independent claim 8 recites in part:

said stent further comprising an end hoop disposed at each end of said stent in which apex sections that point outwardly from said stent lie in a common plane perpendicular to the axis of said stent

Independent claim 22 recites in part

an end hoop disposed at each end of said stent, each end hoop extending all the way around the circumference of the stent, each end hoop defined by a series of substantially straight struts connected by apex sections alternately pointing in opposite axial directions wherein apex sections that point outwardly from said stent lie in a common plane perpendicular to the axis of said stent

Applicant disagrees that Cottone teaches or suggests end elements or end hoops as recited in the instant claims. For reference, a copy of Figs. 1 and 3 of Cottone, provided below, has been annotated to show a plane perpendicular to the axis of the stent.



As can be seen above, the connecting portions 17 do not define a plane perpendicular to the axis of said stent and connecting portions 17 that point outwardly from said stent lie in a common plane perpendicular to the axis of said stent. For at least this reason, Cottone does not teach end elements or end hoops as recited in the instant claims.

Moreover, Cottone does not suggest end elements or end hoops as recited in the instant claims. Cottone states that “the invention relates to an endoprosthesis having a stent component with adjacent windings ... oriented in a generally helical pattern along the length of the endoprosthesis” (col. 1, lines 12-15, emphasis added; see also col. 2, lines 19-20). Thus, Cottone discloses that the entire length of the stent is helical or at an angle to the longitudinal axis of the stent. For at least this reason, Applicant submits that Cottone does not suggest end elements or end hoops as recited in the instant claims.

The Office Action asserted that “it would have been obvious ... to alter the lengths – as suggested and disclosed in Cottone, particularly figs. 3 and 4 – to lie in a common plane, in

order to reduce stress or damage and to provide a known end to the device at which it could be implanted.”

Applicant was unable to find disclosure in Cottone regarding modifying the lengths of struts let alone to modify the length of the struts “in order to reduce stress or damage and to provide a known end” as asserted in the Office Action. For at least this reason, Applicant submits that there is no rationale to support the assertion of obviousness. Moreover, as can be seen above, Fig. 3 of Cottone does not teach or suggest end elements or end hoops perpendicular to the stent axis.

Based on the above, Applicant submits that Cottone does not teach or suggest each and every element of claims 7, 8, and 22. Applicant requests withdrawal of the rejection and submit that claims 7, 8, and 22 are in condition for allowance.

Dependent claims 10-12

Dependent claims 10-12 depend upon independent claim 8. As discussed above, Cottone does not teach or suggest each and every element of independent claim 8. Moreover, Cottone does not teach or suggest each and every element of dependent claims 10-12. As discussed above, Cottone does not disclose that the figures are drawn to scale (see MPEP 2125). Moreover, only a portion of the structure forming each end of the stent is shown. Thus, any assertions as to the portions not shown are speculative.

Dependent claim 10 recites “the struts between apex sections of said end hoop progressively overlap struts of an adjacent hoop leading to an end strut.” The figures of Cottone do not show struts between apex sections of said end hoop that progressively overlap struts of an adjacent hoop leading to an end strut. Clarification is requested.

Dependent claim 11 recites “wherein the end hoops each comprise an end strut that is aligned adjacent to and connected to another strut of said end hoop.” The figures of Cottone do not show an end strut as recited in claim 11. As discussed above, one end of the winding is a connecting portion welded to another connecting portion and the other end of the winding is a short curved structure that is welded to a connecting portion of an adjacent winding. Clarification is requested.

Dependent claim 12 recites “wherein said end strut is connected to said another

strut with a weld having a first weld length and said connecting members in said hoops that are not end hoops comprise a weld having a second weld length that is less than said first weld length.” Applicant was unable to find disclosure in Cottone regarding welds of different lengths.

Based on the above, Applicant submits that claims 10-12 are patentable over Cottone. Applicant requests withdrawal of the rejection and submits that claims 10-12 are in condition for allowance.

C. Cottone does not teach or suggest “at least one apex section comprises two struts attached thereto with one strut longer than the other strut”

Claims 2, 14, 22, and 24 each recite in part “at least one apex section comprises two [substantially straight] struts attached thereto with one strut longer than the other strut.” In reference to claim 2, the Office Action asserted that “the struts can vary in length at the endzones, see fig. 3.” As discussed above, in reference to boxes 1 and 2 of annotated Fig. 3 of Cottone, one structure, shown in box 1, is a connecting portion 17 which is only engaged to one leg and therefore is not an apex section engaged to two substantially straight struts as recited in the instant claims. The other structure, shown in box 2, is a curved structure that has a different configuration than legs 16. Applicant submits that the connecting portion engaged to a leg and to the curved structure is not an apex section engaged to two substantially straight struts as recited in the instant claims. For at least these reasons, Applicant submits that Cottone does not teach or suggest at least one apex section comprising two struts attached thereto with one strut longer than the other strut.

Applicant requests withdrawal of the rejection and submits that the instant claims are in condition for allowance.

D. Independent Claim 14

As discussed above, Cottone does not teach or suggest at least one apex section comprising two substantially straight struts attached thereto with one strut longer than the other strut. This is contrary to independent claim 14. Moreover, Cottone does not teach or suggest “adjacent circumferential hoops being engaged by at least one connector, a first end of the at least one connector being parallel to and extending from a substantially straight strut of a first

circumferential hoop and a second end of the at least one connector being parallel to and extending from a substantially straight strut of a second circumferential hoop” as further recited in claim 14.

As discussed above, the welds of Cottone engage adjacent connecting portions 17. Moreover, Applicant submits Cottone does not teach or suggest that the welds have ends parallel to the legs 16 let alone ends that extend from the legs. For at least these additional reasons, Applicant submits that claim 14 is patentable over Cottone. Applicant requests withdrawal of the rejection.

E. Independent claim 33

Independent claim 33 recites in part:

said connecting member is a bridging member with a first end aligned with and connected to said first strut and a second end aligned with and connected to said second strut

As discussed above, the welds of Cottone are not bridging members as recited. Moreover, as discussed above, Cottone does not teach or suggest that the welds have a first end aligned with and connected to said first strut and a second end aligned with and connected to said second strut, as recited in independent claim 33. For at least these reasons, claim 33 is patentable over Cottone. Applicant requests withdrawal of the rejection.

35 USC 103 - Becker

In the Office Action, claims 1-2, 4-14, 16, 18-25, 29-33, and 35 were rejected under 35 USC 102(e) as being anticipated by Becker (6,117,165).

As submitted in the Amendment filed October 12, 2009, Becker is not prior art to the instant application. The instant application claims priority to March 5, 1998. Becker was filed June 10, 1998 and was published as a patent on September 12, 2000. Thus, Becker is not prior art under 35 USC 102(a), 35 USC 102(b), or 35 USC 102(e)(2).

Conclusion

Based on at least the above, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-2, 4-14, 16, 18,-24, 29-33, and 35 is requested.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,
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